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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/535,456	05/19/2005	Marten Johansson	35947-216981	4290

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EXAMINER

FERGUSON, MICHAEL P

ART UNIT	PAPER NUMBER
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3679

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	04/23/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

10/535,456

Applicant(s)

JOHANSSON ET AL.

Examiner

Michael P. Ferguson

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-18 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 19 May 2005 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date 05/19/05.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: ____.

DETAILED ACTION

Drawings

1. The drawings are objected to because of the following:

Elements **2,4,5,6,12,16,17,18,19** in the cutaway and cross-sectional views of Figures 1-3 and 5 lack proper cross-hatching.

2. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the locking ring and the fixing element designed as an integrated unit, claimed in claims 4 and 13, must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner,

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the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

3. Figure 1 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). Corrected drawings in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Objections

4. Claims 10, 12 and 17 are objected to because of the following informalities:

Claim 10 (line 2) recites "an upper flange half and a lower flange half". It should recite --an upper flange half and a lower flange half of a flanged connection--.

Claim 10 (line 6) recites "wherein when joining a clamping force". It should recite --wherein, when joining, a clamping force--.

Claim 12 (line 2) recites "wherein when joining a contact force". It should recite --wherein, when joining, a contact force--.

Claim 17 (line 3) recites "the fasteners used for fitting". It should recite --fasteners used for fitting the flanged connection to the machine tool--.

For the purpose of examining the application, it is assumed that appropriate correction has been made.

Claim Rejections - 35 USC § 112

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

6. Claims 4 and 13 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 4 recites "wherein the locking ring and the fixing element are designed an integrated unit". However, claim 1 (line 6) clearly claims the locking ring and the fixing element as two separate elements; "wherein the locking ring is supplemented by a fixing element". Such limitations of claim 4 contradict the previously claimed structural limitations of claim 1. Accordingly, one is unable to determine the metes and bounds of such claim.

Claim 13 recites "wherein the locking ring and the fixing element are designed an integrated unit". However, claim 10 (line 6) clearly claims the locking ring and the fixing element as two separate elements; "wherein when joining a clamping force is applied around the gas-filled spring by a fixing element supplementing the locking ring". Such limitations of claim 13 contradict the previously claimed structural limitations of claim 10. Accordingly, one is unable to determine the metes and bounds of such claim.

Claim Rejections - 35 USC § 102

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

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(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

8. Claims 1-9 are rejected under 35 U.S.C. 102(b) as being anticipated by Manton (US 3,652,110).

As to claim 1, Manton discloses flanged connection capable of fixing a gas-filled spring in a machine tool, the flanged connection comprising an upper flange half **12** and a lower flange half **12**, which can be joined together and which each have a through-opening capable of receiving a gas-filled spring (constituted by fluid-filled tube **11**; Figure 1), and a locking ring **25,28** capable of securing a gas-filled spring by insertion into a groove **29** of complementary design around the gas-filled spring and intended for fixing between the flange halves, wherein the locking ring is supplemented by a fixing element **13** designed to apply a clamping force around the gas-filled spring when joining the flange halves together (Figures 1 and 4, column 2 lines 45-51).

Examiner notes that neither a gas-filled spring nor a machine tool have been positively claimed as elements of the flanged connection; such elements have only been recited as intended use. Accordingly, all that is required of the limitations of claim 1 and its dependent claims is a connection capable of use with such elements.

As to claim 2, Manton discloses a flanged connection wherein the locking ring **25,28** and the fixing element **13** are designed as at least two separate parts (Figure 4).

As to claim 3, Manton discloses a flanged connection wherein the fixing element **25,28** is designed to apply a contact force against the locking ring **13** (Figure 4).

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As to claim 4, Manton discloses a flanged connection wherein the locking ring **25,28** and the fixing element **13** are designed as an integrated unit (locking ring **25,28** and fixing element **13** function as an integrated unit; Figure 4).

As to claim 5, Manton discloses a flanged connection wherein at least one of the flange halves **12** on its inside has a section inclined in relation to the central axis of the flanged connection and designed to bring a correspondingly inclined section on the outside of the fixing element **13** into engagement in order to produce the clamping force (Figures 1 and 4).

As to claim 6, Manton discloses a flanged connection wherein the fixing element **13** has a groove running along its outside and designed to bring a projecting part arranged on the inside of one of the flange halves **12** having the inclined section into engagement (Figure 4).

As to claim 7, Manton discloses a flanged connection wherein the fixing element **13** has a recess along its inside designed to receive the locking ring **25,28** (Figure 4).

As to claim 8, Manton discloses a flanged connection wherein the flanged connection is capable of being fitted to a machine tool by means of fasteners **14'** and that the fasteners are designed to generate the clamping force between the fixing element **13** and a gas-filled spring (constituted by fluid-filled tube **11**; Figure 1) and where appropriate to generate a contact force between the fixing element and the locking ring **25,25** (Figure 4).

As to claim 9, Manton discloses a flanged connection wherein the clamping force is designed to prevent rotation of a gas-filled spring (constituted by fluid-filled tube 11; Figure 1).

Claim Rejections - 35 USC § 103

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. Claims 10-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Admitted prior art (Figure 1) in view of Manton.

As to claims 10-15, Admitted prior art (Figure 1) discloses a method of fixing a gas-filled spring 1 in a machine tool 2, by which method an upper flange half 4 and a lower flange half 5 which can be joined together are fitted around the gas-filled spring and a locking ring 6 arranged between the flange halves is fitted around the gas-filled spring in a groove 7 of complementary design and is fixed between the flange halves securing the gas-filled spring (Figure 1).

Admitted prior art fails to disclose a method wherein, when joining, a clamping force is applied around the gas-filled spring by a fixing element supplementing the locking ring; wherein the locking ring and the fixing element are designed as at least two separate parts; wherein a contact force is also applied against the locking ring by the fixing element; wherein the locking ring and the fixing element are designed as an integrated unit; wherein a section inclined in relation to the central axis of the flanged

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connection on the inside of at least one of the flange halves is brought into engagement with a correspondingly inclined section on the outside of the fixing element, the fixing element being applied around the gas-filled spring with the clamping force and where appropriate being applied against the locking ring with a contact force; and wherein a groove running along the outside of the fixing element is brought into engagement with a projecting part arranged on one of the flange halves having the inclined section.

Manton teaches a clamping method wherein a clamping force applied around a fluid-filled tube **11** by a locking ring **25,28** arranged between upper and lower flange halves **12** is supplemented by a fixing element **13**, wherein the locking ring and the fixing element are designed as at least two separate parts, wherein a contact force is also applied against the locking ring by the fixing element, wherein the locking ring and the fixing element are designed as an integrated unit (locking ring **25,28** and fixing element **13** function as an integrated unit), wherein a section inclined in relation to a central axis of the flanged connection on the inside of at least one of the flange halves is brought into engagement with a correspondingly inclined section on the outside of the fixing element, the fixing element being applied around the fluid-filled tube with the clamping force and where appropriate being applied against the locking ring with a contact force; and wherein a groove running along the outside of the fixing element is brought into engagement with a projecting part arranged on one of the flange halves having the inclined section; fixing element **25,28** applying a radial force to and providing a positive locking engagement with fluid-filled tube **11** to prevent lengthwise movement of the tube relative to flanged connection **12** (column 2 lines 45-51, Figure 4).

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Accordingly, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the method as disclosed by Admitted prior art to have the clamping force applied by the locking ring supplemented by a fixing element as taught by Manton in order to apply a radial force to and to provide a positive locking engagement with the gas-filled spring to prevent lengthwise movement of the spring relative to flanged connection.

As to claim 16, Admitted prior art (Figure 1) discloses a method wherein the clamping force is generated when the flanged connection is fitted to the machine tool 2 and that the clamping force is of a predefined magnitude.

As to claim 17, Admitted prior art (Figure 1) discloses a method wherein the magnitude of the clamping force is adjusted by adjusting the tightening torque of fasteners 8 used for fitting the flanged connection to the machine tool 2.

As to claim 18, Admitted prior art (Figure 1) discloses a method wherein clamping force serves to prevent rotation of the gas-filled spring 1.

Conclusion

The prior art made of record and not relied upon is considered pertinent to the applicant's disclosure. The following patents show the state of the art with respect to flanged connections:

Boughton (US 2,868,576) and Fujita et al. (US 5,145,277) are cited for pertaining to flanged connections comprising an upper and a lower half and a locking ring.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael P. Ferguson whose telephone number is (571)272-7081. The examiner can normally be reached on M-F (8:00-5:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Daniel P. Stodola can be reached on (571)272-7087. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



MPF

04/18/07



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